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INTELLIGENCE MEMORANDUM

QUARTERLY ESTIMATE OF THE PRODUCTION OF AIRCRAFT IN THE SINO-SOVIET BLOC APRIL-JUNE 1955

CIA/RR IM-414

3 October 1955

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FOREWORD

This publication is the first in a series to be issued on a quarterly basis summarizing production of aircraft in the Sino-Soviet Bloc. The estimates presented are intended to supersede those contained in previous CIA reports and are published to satisfy consumer requests for the most recent estimates of aircraft production in the Bloc. Both the methodology and the technical terms employed in previous reports have been utilized in the present report. Changes in the estimates have resulted from later information and analysis rather than from any methodological change. No interagency coordination has been attempted, and no dissemination of this memorandum outside of CIA is planned.

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CIA/RR IM-414 (ORR Project 33.934)

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QUARTERLY ESTIMATE OF THE PRODUCTION OF AIRCRAFT IN THE SINO-SOVIET BLOC* APRIL-JUNE 1955

1. Production.

From the first to the second quarter of 1955 the production of aircraft in the Sino-Soviet Bloc declined about 3 percent, in numbers of aircraft produced.** The decline is principally in the output of fighter aircraft in the USSR, where the production of the Fresco (Mig-17) is being replaced by the production of later models. In contrast to the reduction in numbers, an increase of about 4 percent in total airframe weight produced was reached during the second quarter of 1955. This increase results from the trend toward greater weight in modern aircraft. A specific example of this trend in the current estimate is the conversion from the production of the Fresco at certain Soviet plants to that of later models which weigh 50 to 60 percent more than the Fresco.

The USSR produces most of the aircraft manufactured in the Sino-Soviet Bloc. Of the 2,434 aircraft produced during the second quarter of 1955, 2,121 aircraft, or about 87 percent, were produced in the USSR,*** and the remainder, 313 aircraft, were produced in the European Satellites.**** There is still no indication that Communist

^{*} The estimates and conclusions contained in this memorandum represent the best judgment of ORR as of 15 September 1955.

^{**} The estimated production of aircraft in the Sino-Soviet Bloc from 1953 to mid-1955, by number, is given in Table 1, p. 2, below, and in Table 2, p. 3, below, by airframe weight.

^{***} The production of aircraft in the USSR, from 1953 to mid-1955, by number, is given in Table 3, p. 5, below, and by airframe weight, in Table 4, p. 6, below.

^{****} The production of aircraft in the European Satellites from 1953 to mid-1955, by number, is given in Table 5, p. 7, below, and by airframe weight, in Table 6, p. 8, below.

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China or the Asiatic Satellites are producing aircraft. On the basis of airframe weight, 94 percent of the production in the Sino-Soviet. Bloc took place in the USSR. The difference between the Soviet share of the production on a weight basis as opposed to a unit basis is explained by the production of relatively lighter aircraft by the European Satellites.

Combat aircraft comprised about 57 percent of the total aircraft production, in units, during the second quarter of 1955. This proportion remains essentially unchanged from the first quarter of 1955.

Table 1

Estimated Production of Aircraft in the Sino-Soviet Bloc, by Number 1953 to Mid-1955

						Units
	-			19	955	
Type of Aircra: t	1953	1954	lst G	uarter	<u>2d</u>	Quarter
Jet bombers						
Heavy Medium Light	0 147 1,384	16 181 1 , 276		13 85 321		17 94 321
Jet fighters	4,414	4,423	1,	012		916
Ground attack	457	207		30		30
Transports	1,662	1,681		239		249
Trainers						4
Jet Piston	522 877	1,265 1,077	4	363 284		363 291
Others a/	728	794		170	5.0	153
Total	10,191	10,920	<u>2</u>	,517		2,434

a. Helicopters, gliders, and seaplanes.

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Table 2

Estimated Production of Aircraft in the Sino-Soviet Bloc, by Weight 1953 to Mid-1955

	4.5	Thousand Pounds of Airframe Weight a/				
	,	1.955				
Type of Aircraft	1953	1954	1st Quarter	2d Quarter		
Jet bombers						
Heavy Medium Light	0 7,674 25,410	1,800 9,240 23,360	1,460 4,340 5,840	1,910 4,805 5,840		
Jet fighters	31,446	33,214	7,684	7,661		
Ground attack	3,700	1,676	243	243		
Transports	9,240	9,860	1,906	2,106		
Trainers						
Jet Piston	3,348 936	11,206 1,394	3,115 588	3,115 608		
Others <u>b</u> /	7,012	8,669	1,800	1,664		
Total	88,766	100,419	<u>26,976</u>	27,952		

a. These figures include the production of spare parts.

b. Helicopters, gliders, and seaplanes.

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The importance of the USSR as the primary producer again is emphasized by the fact that roughly 90 percent of the production of combat aircraft in the Sino-Soviet Bloc took place in the USSR.

2. New Types.

Present estimates have been revised considerably from those of previous CIA reports as a result of the new aircraft displayed by the USSR during recent public displays.* The Bison, a 4-jet heavy bomber, of which a total of 21 has been seen, is believed, on the basis of Bison flights from and Bisons seen on the factory airfield, to be in production at Factory No. 23 in Moscow. The two new fighter aircraft -- the Farmer, a Mig day-fighter, and the Flashlight, an all-weather interceptor -- are being phased into production at Soviet fighter plants which previously produced or currently produce the Fresco. Production of the new large helicopter, the Horse, is estimated to have begun at Factory No. 82 in Moscow, which formerly produced the Hound (Type 36), a smaller helicopter. Horses were recently sighted in the vicinity of Factory No. 82. The Camel, a twin-jet transport aircraft, is the most recent model displayed by the USSR. It is estimated that the Camel is still in the prototype stage because only one has been seen to date. Factory No. 84 in Tashkent, which has produced most of the large Soviet transport aircraft in the past, quite possibly will be the production site for the Camel. The new Bear, a 4-turboprop heavy bomber, currently is not considered to be in production. At least seven of these aircraft are known to be in existence from recent sightings, but there has been no l'irm indication that series production of the Bear is taking place at any of the Soviet plants.

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^{*} The rehearsals curing April for the canceled airshow of 1 May 1955 and the actual Aviation Day Airshow of 3 July 1955.

Table 3

Estimated Production of Aircraft in the USSR, by Number 1953 to Mid-1955

		3			Units
Y]	L <u>955</u>	
Type of Aircr	aft <u>1953</u>	1954	1st Quarter	2d	Quarter
Jet bombers	•				
Heavy Medium Light	0 147 1,384	16 181 1 , 276	13 85 321		17 94 321
Jet fighters	4,119	3,964	897		798,
Transports Trainers	1,662	1,681	239		249
	*				1
Jet Piston	5 22 684	1 , 176 828	294 207		294 207
Others a/	683	770	158		141
Total	<u>9,201</u>	9,892	2,214	2	,121

a. Helicopters, gliders, and seaplanes.

Table 4

Estimated Production of Aircraft in the USSR, by Weight 1953 to Mid-1955

		Thousand	Pound	s of Airfi	rame Weight a/
•				1955	
Type of Aircraft	1953	1954	lst	Quarter	2d Quarter
Jet bombers					
Heavy Medium Light	0 7,674 25,410	1,800 9,240 23,360		1,460 4,340 5,840	1,910 4,805 5,840
Jet fighters	29,662	30,443		6,989	6,948
Transports	9,240	9,860		1,906	2,106
Trainers				* .	
Jet Piston	3,348 727	10,635 960		2,673 259	2,673 259
Others b/	6,957	8,652		1,786	1,650
Total	83,018	94,950		25,253	<u> 26, 191</u>

a. These figures include the production of spare parts.

b. Helicopters, gliders, and seaplanes.

Table 5

Estimated Production of Aircraft in the European Satellites, by Number 1953 to Mid-1955

					Units	
				1955		
Country	Type of Aircraft	1953	1954	lst Quarter	2d Quarter	
Czechoslovakia	Jet fighter Ground attack Jet trainer Piston trainer Others	294 457 0 66 25	394 207 89 165 0	69 30 69 71 6	69 30 69 78 6	
Total		842	855	245	252	
Poland	Jet fighter Piston trainer	1	65 60	46 0	49 0	
Total	# 4	<u>1</u>	125	<u>46</u>	49	
Bulgaria	Piston trainer	<u>103</u>	<u>0</u>	<u>o</u>	<u>o</u> ,	
Rumania	Piston trainer	24	24	<u>6</u>	<u>6</u>	
Hungary	Others	20	<u>24</u>	<u>6</u>	<u>6</u>	
Grand total		<u>990</u>	1,028	303	313	

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1953 to Mid-1955

Table 6

Estimated Production of Aircraft in the European Satellites, by Weight

Thousand Pounds of Airframe Weight 2/ 1955 1st Quarter 2d Quarter 1954 Type of Aircraft 1953 Country 417 2,380 417 1,775 Czechoslovakia Jet fighter 243 1,676 243 3,700 Ground attack 442 442 571 Jet trainer 0 343 324 349 Piston trainer 72 10 10 41 Others 5,588 4,976 1,436 1,455 Total 296 278 9 391 Jet fighter Poland 0 0 64 0 Piston trainer 296 278 455 2 Total 0 116 <u>0</u> Piston trainer Bulgaria 21 21 Piston trainer Rumania Others 14 Hungary <u>1,723</u> Grand total

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a. These figures include the production of spare parts.

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